“Global Significance of Chinese Educational Philosophy”

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# “Chinese Education and the Social Ecosystem Model”

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Chinese educational system has been characterized today as three-fold: “learning for all, lifetime learning, and personalized learning” (Yang 2024, 4). This is a very modern concept of educational system, shared by most developed societies at present, which means that China has achieved modernization of its society at a very high speed and in a very short time. What took centuries in Western societies has been accomplished in China only in a few decades. One must not forget that the Napoleonic educational system, which was imitated and enforced all over Europe during the XIX century, was meant to educate the elites, the ruling elites, following the tradition of previous centuries. That was also the educational system in China and in most Eastern societies.

After the II World War most Western societies, mainly European and the United States, began the “educational revolution” of requiring compulsory elementary education for all citizens until a certain age, 9, 14, 16 or 18 years of age, as well as opening the universities to the sons (and later to daughters) of the new growing middle classes. This process took place during the second half of the XX century in Western societies, when illiteracy was eliminated or highly reduced in the more developed countries, and soon imitated by developing and emerging new ones. A similar change took place in China after 1976, but the rate of change has been much more rapid, so that nowadays learning for all has been achieved mainly in urban areas, though the aim is to extend it to rural areas as well. A similar process has taken place regarding the concept of “lifelong learning”. Traditionally, learning was divided into different phases attached to age periods, primary, secondary and tertiary education, but in the mid XX century evening schools were established to help

adults finish their primary and/or secondary education, and even to help them get a higher education, with university courses for the aged, night courses for those who combine work and study, and many other facilities of "permanent education".

Finally, "personalized education" has also followed a similar process, making it possible to educate the handicapped, physically or mentally, as well as those who, for whatever reason, want to continue and complete their educational process. To acknowledge that Chinese educational system is in the same process as other developed societies, and with similar goals, is not only good news but the best evidence of the great changes that have taken place in China during the past 50 years.

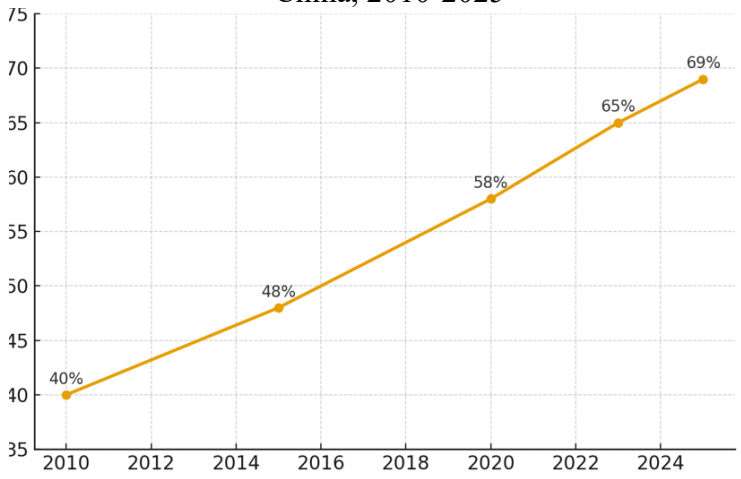
The main objective of this presentation is to explain the changes that have taken place and are taking place in the Chinese educational system in the light of the social ecosystem model that I presented one year ago in a similar forum to this one (Díez Nicolás 2024).

According to the social ecosystem model, and taking the Chinese educational system as an ecosystem, the population factor is the aggregated sum of educators and students at all levels of education. The environment factor where the population may find the resources needed for survival is mainly the funds available to the educational system. The material culture or technology that is being used by educators is made of the technological innovations that are being used in education. And the non-material culture (social organization and values systems) is finally made up of the educational policies and goals established by the government.

The population of China shows most of the characteristics of more developed countries (Population Reference Bureau, 2025). Its population, over 1.4 billion people (17% of the total world population) has a negative natural growth of -0.1% (-0.2% in more developed countries) and no net migration (developed countries have a positive 6% net migration rate). But most demographic indicators are like those in the more developed societies: very low infant mortality, total fertility rate about half the replacement rate, and a still young, but aging, population. This process of demographic transition, from high levels of mortality and fertility to low levels of mortality and fertility, from young to aging population, has been achieved during the last 25 years, a much shorter period than in other developed countries.

A similar process has taken place when considering the goal of "learning for all". Thus, China has changed from less than half of the adult population with complete secondary education in 2015 to almost seven out of ten in 2025. This growth of complete secondary education has been due to the expansion of upper secondary education since 2010, the expansion of urban population due to internal migration flows from rural to urban areas, the rise in personal income, and the reduction of school dropout because of public programs such as "Compulsory Education in Rural Areas", "Hope Project", and others. Nevertheless, the goal is to eliminate or reduce the gap between urban (90% of population has completed secondary education) and rural areas (50-60% have completed secondary education).

% of adult population (25 years +) with completed secondary education, China, 2010-2025




Source: Estimated from different sources cited in the bibliography.

The trend of growth of adult population with a university degree is similar, from only 10% in 2010 to more than double (23%) in 2025.

According to the Human Development Report (2025) published by the United Nations, the mean number of years of school of the population in China is 8.0 years, lower than in other developed countries (around 14% in Iceland, United Kingdom and United States, and around 13% in Japan and the Russian Federation). But confirming the great change that has been taking place in China in recent decades, the expected number of years of school completed in China is about 16, the same as in the United States and Japan, higher than in the Russian Federation (13), and a little lower than in Iceland (19) and the United Kingdom (18 years). This implies that China, coming from lower levels, is catching up very quickly with the more developed countries.

The increase in completed secondary education, and more recently, in universities, has also implied a similar increase in the number of qualified teaching staff in schools and universities, like in other more developed countries.

According to the ecosystem model, populations must survive based on resources that are to be found in the environment. In this case, the resources are the funds available to be used on the educational system, which includes building schools and universities, providing for all kinds of material products, from labs to libraries. The best and most useful indicator of resources available to the educational system is the proportion of the national GDP devoted to the educational system.

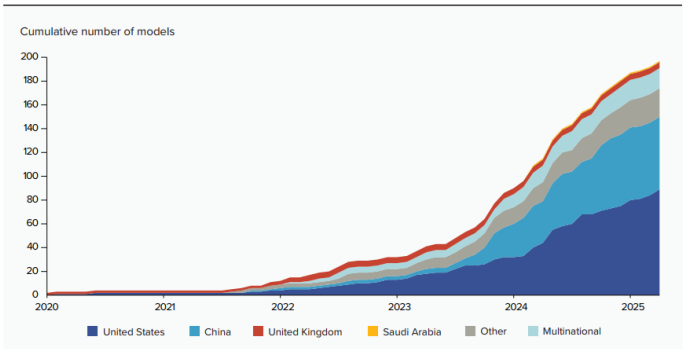
Once more, when compared with other more developed countries, China is growing much more rapidly, reducing the historical gap with other more developed countries. In fact, according to the more recent data from The Global Economy and UNESCO, the percentage of the GDP devoted to education in different countries was as follows in the year 2000: United Kingdom (6,0%), United States (5,9%), Japan (3,8%), Russian Federation (2,2%), and China (1,9%). But the data for the most recent year, 2022, show that the increase of resources devoted to the educational system in China is higher than in those selected countries: United Kingdom (5,9%), United States (5,4%), Russian Federation (3,99%), China (4,02%), and Japan (3,4%). Thus, while the United States, Japan and the United Kingdom have reduced, in relative terms, the financial resources devoted to education since 2000, the Russian Federation and even more, China, have increased relatively their effort to finance their educational system.

The third element in the social ecosystem model is the material culture, that is, technology. This model relies on the assumption that only human populations survive by adaptation to their environment through culture, in the broader meaning of this concept (that is, everything that humans have produced which does not come genetically or is not found in Nature). Only human populations can create, store and transmit culture. I have always maintained that technological change is the main factor explaining social change (Díez Nicolás 2018).

Based again on the information provided by the Human Development Report (2025), it may be observed that China is doing a great effort in developing and using new technologies for education. The most recent technological innovation is, no doubts, Artificial Intelligence, and it is quite evident that China is one of the three countries that

is developing more large-scale artificial intelligence models, together with the United States and the United Kingdom.

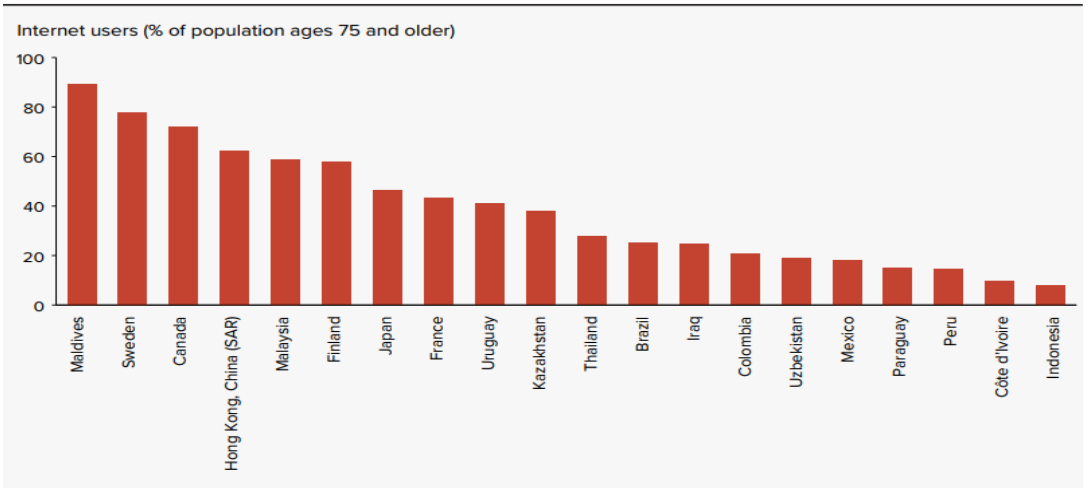
Figure 5.5 **The majority of today's large-scale artificial intelligence models are developed by organizations based in the United States, followed by China and the United Kingdom**




**Source:** Epoch AI 2024d.

Besides, all technological innovations disseminate earlier among the younger generations, and later among the older generations. In the following graph it may be seen the stark variance in internet use among the population 75 years and older in different countries. Though the data for China are limited to Hong Kong, it may be assumed that they represent other Chinese urban places. In any case, it seems that use of internet is very likely higher in China than in other developed countries like Finland, Japan or France.

Figure 3.10 **Stark variance in internet use among older people across countries with different Human Development Index levels**




**Source:** Human Development Report Office using data from ITU (2024a).

Finally, the fourth element in the ecosystem model refers to non-material culture, which includes social organizations but also values systems. The organizational structure of education in China is that of co-existence of public and private education in all levels of education. However, the public system is dominant and controlled by the State, especially in primary and secondary education. Private education exists mainly in big cities, but

follows the same Chinese curriculum, but usually have better premises, smaller classes and bilingual programs. There are also international schools who offer different curricula. At the university level, public universities are much more in numbers, more prestigious and free for students than private ones, though students may be asked to pay small fees. In general, private universities have lower prestige than public universities.

According to the Education Rankings by Country (2025) published by World Population Review (US News) South Korea occupies the 1st rank, Japan the 6th, Germany the 7th, United Kingdom the 12th, China the 13th, Russia the 22nd, United States the 31st, India the 101st and Nigeria the 191st, to cite a few examples. It must be underlined that this ranking is based on the evaluation made in each country by their nationals. There are several other Education rankings, where evaluation is based on different criteria, but many countries, including China, are not included.

Besides the models of educational organizations, the fourth element includes values systems. The best source for that information is the World Values Survey, in whose Data Archive one can find comparative information for China and many other countries. We have selected one indicator regarding the confidence of the population in their universities using a scale of 1 to 4 points where 1 means “none at all”, 2 = “not very much”, 3 = “quite a lot”, and 4 = “a great deal”. The average confidence (arithmetic mean value) is 3,19 points in China, followed by Russia (2,80), Japan (2,69) and the United States (2,54).

As a final note on the present Chinese educational system, it is relevant to underline the main reforms that are taking place under the guidance of Xi Jinping: 1) increase the quality of the teaching workforce, 2) reduce gap in educational development among regions, and between rural and urban areas, 3) make compulsory education in rural areas, 4) adapt education to real social needs, and 5) increase public expenditure in education (Yang 2024, 5).

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